



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,555	02/06/2002	Michael Nero	WEAT/0201	6958
36735	7590	01/10/2006	EXAMINER	
PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD, SUITE 1500 HOUSTON, TX 77056			EDWARDS JR, TIMOTHY	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/068,555	NERO ET AL	
	Examiner	Art Unit	
	Timothy Edwards, Jr.	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 12-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examiner is unclear, with respect to claim 12, how a "signal-bearing medium containing a program" is possible or how a signal-bearing medium, with respect to claims 13-21, can encompass/comprise the limitations of these claims.

Specification

3. The use of the trademark Bluetooth and CAN, on page 16 of the specification, has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2,5,6,8,10-14,17,18,20,32,41,43 are rejected under 35 U.S.C. 102(b) as being anticipated by Mullins '156.

Considering claim 1, Mullins discloses a down-hole system comprising a) a server node for detecting the presence of each secondary node (see col 6, lines 57-60 and fig 2); b) server node requesting information from at least one of secondary nodes (see col 6, lines 27-31); c) server node issuing a control signal to at least one of secondary nodes (see col 6, lines 24-27); d) server node is disposed on a first module of a modular down-hole tool (see fig 2, item 20); e) secondary nodes (see fig 2, intervals #1 and #2); f) wherein the first and second modules are releasably coupled to one another (see col 2, lines 26-29 and col 6, lines 52-60).

Considering claim 2, Mullins discloses the limitation of this claim see col 8, lines 30-34.

Considering claim 5, Mullins discloses the limitation of this claim see col 6, lines 32-45 and col 8, lines 30-35.

Considering claim 6, Mullins discloses the limitations of these claims see col 6, lines 28-31.

Art Unit: 2635

Considering claims 8,11,17,20 the limitations of these claims are interpreted and rejected as stated in claim 5.

Considering claims 10,18 the limitations of these claims are interpreted and rejected as stated in claim 6.

Considering claims 12 and 14, the limitations of these claims are interpreted and rejected as stated in claim 1.

Considering claim 13, the limitation of this claim is interpreted and rejected as stated in claim 2.

Considering claim 32, the limitation of this claim is interpreted and rejected as stated in claim 1.

Considering claim 41, Mullins discloses the limitations of this claim as discloses in claim 1 (see col 5, line 64 to col 6, line 6; col 6, lines 20-31 and lines 52-60; col 7, lines 26-34 and fig 2).

Considering claim 43, Mullins discloses the limitation of this claim see fig 2, items 26 and 25.

Art Unit: 2635

6. Claims 22-25,27,29-31,33,36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Tubel et al '547.

Considering claim 22, Tubel discloses a down-hole network well control system comprising, a) a server node (see fig 9, item 400); b) server node comprising a transceiver configured to communicate with a plurality of secondary nodes (see col 20, lines 13-18); c) the server node detecting the presence of the secondary nodes (see col 20, lines 25-27 and line 66 to col 21, line 6); d) the server node requesting information from the secondary nodes (col 21, lines 29-31); e) the server node issue a control signal to the secondary nodes (see col 21, lines 19-28).

Considering claim 23, Tubel discloses the limitations of this claim in col 8, lines 40-44 and col 20, lines 33-39, see fig 1.

Considering claim 24, Tubel discloses the limitation of this claim in col 20, lines 49-55.

Considering claim 25, Tubel discloses the limitations of this claim in col 6, lines 48-62.

Considering claim 27, Tubel discloses the limitations of this claim in col 20, lines 10-14.

Considering claim 29, Tubel discloses the limitations of this claim in col 15, lines 56-67.

Art Unit: 2635

Considering claim 30, Tubel discloses the limitations of this claim in col 15, lines 1-7 and lines 21-29.

Considering claim 31, Tubel discloses the limitations of this claim in col 14, lines 36-43 and col 15, lines 1-7.

Considering claim 33, Tubel discloses the limitations of this claim in col 20, lines 25-34.

Considering claim 36, Tubel discloses the limitations of this claim in col 20, lines 32-39.

Considering claim 37, Tubel discloses the limitations of this claim in col 14, lines 36-43 and col 15, lines 1-7.

Considering claim 38, the limitations of this claim is interpreted and rejected as stated in claim 29.

Considering claim 39, the limitations of this claim is interpreted and rejected as stated in claim 30.

Considering claim 40, the limitations of this claim is interpreted and rejected as stated in claim 31.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3,4,7,9,15,16,19,21,42,44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins as applied to claim 1 above, and further in view of Tubel et al '547.

Considering claim 3, Mullins does not specifically recite the server node transmitting a wake-up signal to each of the secondary node and receiving an acknowledgement from each secondary node. Mullins discloses in col 6, lines 52-61 sequentially assembling a down-hole system and installing a diagnostic sub to perform test on the modules. This would suggest transmitting a signal to each of the modules and receiving an acknowledgement from each module. Tubel teaches in col 20, lines 25-29 and lines 59-61 and col 21, lines 13-27 a controller transmitting an address signal to each of the secondary node and receiving an acknowledgement from each secondary node. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Mullins to include transmitting a wake-up signal to each of the secondary node and receiving an acknowledgement from each secondary node as taught by Tubel because Mullins suggests transmitting a signal to each of the secondary node and

receiving an acknowledgement from each secondary node because this is done when running a diagnostic test.

Considering claims 4,15,16,44 the limitations of these claims are interpreted and rejected as stated in claim 3.

Considering claims 7,9,19,21,42, Mullins does not specifically recite measuring environmental parameter. However, Mullins discloses monitoring well bore parameters. Tubel discloses measuring environmental parameter in col 14, lines 36-43 and col 15, lines 1-7. Therefore, it would have been obvious to one of ordinary skill in the art to modify the sensors of the Mullins system to measure environmental parameter as taught by Tubel because both reference is concern with the monitoring of well bore conditions and relay this information to a remote location.

9. Claims 26,28,34,35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tubel '547.

Considering claims 26,35 Tubel does not specifically recite a modular down-hole tool is a drilling tool. One of ordinary skill in the art would readily recognize the use of bottom-hole-assembly (BHA) and measuring-while-drilling systems, which are tools, and sensors near a drill bit is well known in the art. Therefore, it would have been obvious to on of ordinary skill in the art to use the Tubel system in a drilling operation because

Art Unit: 2635

Tubel is concern with sensing down-hole parameters and transmitting this data to the surface.

Considering claim 28, Tubel does not specifically recite a CAN controller and the physical transmission medium is a CAN bus. Tubel discloses the use of a bus connected to a server and a plurality of down-hole nodes. Applicant admits in his specification on page 16 the CAN controller and protocol is well known standards in the art. Therefore, it would have been obvious to one of ordinary skill in the art to use these devices in the Tubel system because Tubel discloses a controller and a physical transmission medium (a bus).

Considering claim 34, the limitations of this claim is interpreted and rejected as stated in claim 28.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mullins '666, Berg et al '463, Diakonov et al '866, and Parker et al '762 discloses releasable and attachable modules in a well bore environment.

11. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be

Art Unit: 2635

reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

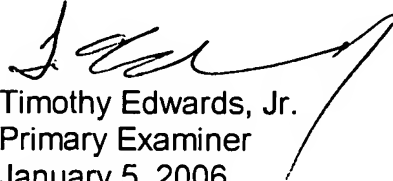
If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached at (571) 272-3068.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Timothy Edwards, Jr.
Primary Examiner
January 5, 2006